

SOI MOSFET HAVING BODY CONTACT FOR PREVENTING FLOATING BODY EFFECT AND METHOD OF FABRICATING THE SAME

Abstract of the Disclosure

- 5 An SOI MOSFET having a body contact for preventing the floating body effect
is provided. The body contact is a trench perforating a body and a buried oxide layer
to a semiconductor substrate. The trench is filled with a conductive material to
electrically connect the body to the semiconductor substrate. Impurity ions are
10 implanted into a predetermined region of the semiconductor substrate in contact with
the lower portion of the body contact to form an ohmic contact. In the SOI MOSFET,
an additional metal interconnection line is not needed to supply power to the body.
Also, malfunction of a circuit due to stray capacitance of a contact can be prevented.

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